

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: East Kentucky Power Cooperativ, Inc.
Mailing Address: P.O. Box 707, Winchester, Kentucky 40392-0707

is authorized to operate an
electric power generating plant at Maysville, Kentucky

Source Name: Hugh L. Spurlock Power Station
Mailing Address: P.O. Box 707 Winchester, Kentucky 40392-0707
Source Location: Route 8, Maysville

Permit Type: Federally-Enforceable
Review Type: Title V
Permit Number: V-97-050
Log Number: E917

Application Complete
Date: February 11, 1997
KyEIS ID #: 103-2640-0009
AFS Plant ID#: 21-161-00009
FINDS Number: KYD072865272
SIC Code: 4911

Region: Huntington-Ashland
County: Mason

Issuance Date:
Expiration Date:

John E. Hornback, Director
Division for Air Quality

TABLE OF CONTENTS

<u>SECTION</u>		<u>DATE OF ISSUANCE</u>	<u>PAGE</u>
SECTION A	PERMIT AUTHORIZATION		1
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		2
SECTION C	INSIGNIFICANT ACTIVITIES		19
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS		21
SECTION E	CONTROL EQUIPMENT OPERATING CONDITIONS		22
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS		23
SECTION G	GENERAL CONDITIONS		25
SECTION H	ALTERNATIVE OPERATING SCENARIOS		30
SECTION I	COMPLIANCE SCHEDULE		30

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be administratively and technically complete on February 11, 1997, the Kentucky Division for Air Quality hereby authorizes the operation of the processing and air pollution control equipment described herein in accordance with the terms and conditions of this. This draft permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emissions units without having first submitted a complete application to the permitting authority and received a permit for the planned activity, except as provided in this permit or in Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Division or any other federal, state, or local agency.

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. However, these provisions do not shield the source from violations of the applicable requirements being established and documented through other credible evidence, nor does it relieve the source from its obligation to comply with the underlying emission limits or other applicable requirements being monitored.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 (01) - Indirect Heat Exchanger (Unit 1)

Description:

Pulverized coal-fired, dry-bottom, wall-fired unit equipped with electrostatic precipitator and low NO_x burners

Number two fuel oil used for startup and stabilization

Maximum continuous rating: 3500 mmBTU/hr

Construction commenced before: 1971

Applicable Regulations:

Regulation 401 KAR 61:015, Existing indirect heat exchangers applicable to an emission unit with a capacity more than 250 MMBTU per hour and commenced before August 17, 1971. Regulation 7, Prevention and control of emissions of particulate matter from combustion of fuel in indirect heat exchangers.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.22 lb/MMBTU based on a three-hour average.

The permittee may assure continuing compliance with the particulate emission standard by operating the affected facility and associated control equipment such that the opacity does not exceed the upper limit of the indicator range developed from COM data collected during stack tests. If five (5) percent of COM data (based on a three-hour rolling average) recorded in a calendar quarter show excursions from the indicator range, the permittee shall contact the Division within thirty (30) days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions which resulted in the excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.

- b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of 60 percent opacity is allowed for a period or aggregate of periods not more than six minutes in any 60 minutes during building a new fire, cleaning the firebox, or blowing soot.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), sulfur dioxide emission shall not exceed 6.0 lbs/MMBTU based on a twenty-four-hour average.

3. Testing Requirements:

- a) The permittee shall conduct at least one performance test for particulates within six months following the issuance of this permit. The upper limit of the indicator range shall be developed from the COM data collected during the stack tests.
- b) If no additional stack tests are performed pursuant to Condition 2. a) above, the permittee shall conduct one performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

4. Specific Monitoring Requirements:

- a) Pursuant to Regulation 401 KAR 61:015, Section 6 (6), monitoring of operations for sulfur dioxide emissions shall be conducted by the use of a continuous emission monitoring system. The continuous emission monitoring system for sulfur dioxide shall comply with Regulation 401 KAR 61:005, Section 3, particularly Performance Specification 2, and the summary shall consist of hourly averages.
- b) In accordance with Regulation 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division.
- c) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.
- d) Pursuant to Regulation 401 KAR 61:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrate compliance with Performance Specification 1 of 40 CFR 60, Appendix B, as requested by the Division for Air Quality.
- e) Pursuant to Regulation 401 KAR 61:005, Section 3 (5), the Division may provide a temporary exemption from the monitoring and reporting requirements of Regulation 401 KAR 61:005, Section 3, for the continuous monitoring systems during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

- a) Records shall be kept in accordance with Regulations 401 KAR 61:005, Section 3 (16) (f) and 401 KAR 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years.
- b) The permittee shall maintain records of the COM data on a three-hour rolling average basis, the number of excursions above the indicator range, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.
- c) The permittee shall keep the results of all compliance tests.

6. Specific Reporting Requirements:

- a) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), Minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:
 1. Owners or operators of facilities required to install continuous monitoring systems for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emissions standard averaging period which is a twenty-four (24) hour averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
 2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity.
 3. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.
 4. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.
 5. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- b) The permittee shall report the number of excursions above the indicator range, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.

7. Specific Control Equipment Operating Conditions:

- a) The electrostatic precipitator shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance of the electrostatic precipitator shall be maintained.
- c) See Section E for further requirements.

8. State-Origin Requirements:

NA

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 02 (02) - Indirect Heat Exchanger (Unit 2)

Description:

Pulverized coal-fired, dry-bottom, tangentially fired unit equipped with electrostatic precipitator, low NO_x burners and flue gas desulfurization (FGD) system
Number two fuel oil used for startup and stabilization
Maximum continuous rating: 4850 mmBTU/hr
Construction commenced: 1981

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable to an emissions unit more than 250 MMBTU/hour and commenced after August 17, 1971

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.

The permittee may assure continuing compliance with the particulate emission standard by operating the affected facility and associated control equipment such that the opacity does not exceed the upper limit of the indicator range developed from COM data collected during stack tests. If five (5) percent of COM data (based on a three-hour rolling average) recorded in a calendar quarter show excursions from the indicator range, the permittee shall contact the Division within thirty (30) days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions which resulted in the excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.

- b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.
- c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 1.2 lbs/MMBTU based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- d) Pursuant to Regulation 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/MMBTU based on a three-hour average.

3. Testing Requirements:

- a) The permittee shall conduct at least one performance test for particulates within six months following the issuance of this permit. The upper limit of the indicator range shall be developed from the COM data collected during the stack tests.
- b) If no additional stack tests are performed pursuant to Condition 2. a) above, the permittee shall conduct one performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

4. Specific Monitoring Requirements:

- a) Pursuant to Regulation 401 KAR 59:015, Section 7(1) and Section 7(4), Regulation 401 KAR 59:005, Section 4, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of Regulation 401 KAR 59:005, Section 4.
- b) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.
- c) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.
- d) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value for the continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C.
- e) All span values computed under d) above for burning combinations of fuels shall be rounded to the nearest 500 ppm.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- f) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).
- g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

5. Specific Record Keeping Requirements:

- a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.
- b) The permittee shall maintain records of the COM data on a three-hour rolling average basis, the number of excursions above the indicator range, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.
- c) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emissions unit, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.
- d) The permittee shall keep the results of all compliance tests.

6. Specific Reporting Requirements:

- a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- 1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - 2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.
 - 3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - 4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments shall be reported.
 - 5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported and defined as follows:
- 1) Excess emissions are defined as any six (6) minute period during which the average opacity of emissions exceeds twenty (20) percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.
 - 2) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.
 - 3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.
- c) The permittee shall report the number of excursions above the indicator range, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

7. Specific Control Equipment Operating Conditions:

- a) The electrostatic precipitator and the flue gas desulfurization shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance of the electrostatic precipitator and the flue gas desulfurization shall be maintained.
- c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 03 (03) - Indirect Heat Exchanger (Auxiliary Boiler)

Description:

Number two fuel oil-fired
Maximum continuous rating: 144 mmBTU/hr
Construction commenced: 1971

Applicable Regulations:

Regulations 401 KAR 61:015, Existing indirect heat exchangers, commenced before August 17, 1971, and Regulation 7, Prevention and Control of Emissions of Particulate Matter from Combustion of Fuel in Indirect Heat Exchangers

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.22 lb/MMBtu based on a three-hour average.
- b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of 60 percent opacity is allowed for a period or aggregate of periods not more than six minutes in any sixty minutes during building a new fire, cleaning the firebox, or blowing soot.
- c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), sulfur dioxide emissions shall not exceed 4.0 lb/MMBtu based on a twenty-four-hour average

3. Testing Requirements:

When the unit is in operation, the permittee shall read, weather permitting, the opacity of the emissions from the stack using EPA Reference Method 9 once per day.

4. Specific Monitoring Requirements:

- a) Pursuant to Regulation 401 KAR 61:015, Section 6 (2), the sulfur content of liquid fuels, as burned, shall be determined based on certification from the fuel supplier. This certification shall include the name of the oil supplier and a statement that the oil complies with the specifications under the definition for distillate oil in Regulation 401 KAR 60:043.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- b) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the rate of fuel burned shall be measured daily on an as-burned basis and recorded while the boiler is in operation.

5. Specific Record Keeping Requirements:

- a) Records documenting the amount of fuel oil consumed shall be maintained.
- b) Records documenting the sulfur content and heating value of the fuel oil shall be maintained.
- c) The permittee shall keep the results of all compliance tests.

6. Specific Reporting Requirements:

- a) See Section F.

7. Specific Control Equipment Operating Conditions:

NA

8. State-Origin Requirements:

NA

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 04 (04) - Coal Handling Operations

Description:

Transfer tower # 1 & 2, reclaim hoppers onto coal conveyor, crusher house, and conveyor drop points.

Operating rate: 4000 tons/hr
Construction commenced : 1981

Applicable Regulations:

Regulation 401 KAR 60:250, Standards of performance for coal preparation plant adopted by reference 40 CFR 60 Subpart Y applicable to conveyors and crushers which process more than 200 tons of coal per day and commenced after October 24, 1974 .

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to Regulation 401 KAR 60:250, 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, emissions which exhibit 20 percent opacity or greater.

3. Testing Requirements:

Pursuant to Regulation 401 KAR 60:250, 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity quarterly.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintained a log of the observation. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determined the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

- a) The permittee shall maintain the records of amount of coal received and processed.
- b) The permittee shall maintain the result of all compliance tests.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The control equipment enclosures, wet suppression, and baghouses used to control particulate emissions shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and / or standard operating practices.
- b) Records regarding the maintenance of the control equipment shall be maintained.
- c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 06 (-) Two fly ash silos (Truck loadout)

Description:

The maximum loading rate: 300 tons/hr.

APPLICABLE REGULATIONS:

Regulation 401 KAR 63:010, Fugitive emissions.
Construction commenced: 1993

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of ash processed.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) Records of the ash processed shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosures and water spray system shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard engineering practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

NA

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 07 (03) - Coal Handling Operations

Description:

Rotary railcar unloader, barge unloader, sampling tower, radial stacker off-loading onto coal pile, haul roads, and yard area.

Operating rate: 4,600 tons/hr

Construction commenced : Prior 1970

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions.

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of coal received and processed.

5. Specific Record Keeping Requirements:

Records of the amount of coal received and processed shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The control equipment (including but not limited to hoods, enclosures, use of dust suppressant/foam, telescopic chute, and water spray system) shall be operated as necessary to maintain compliance with applicable requirements in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

NA

a) Operating Limitations:

NA

b) Emission Limitations:

NA

9. Alternate Operating Scenarios:

NA

10. Compliance Schedule

NA

11. Compliance Certification Requirements

See Section F.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4).

1. Storage vessels containing petroleum or organic liquids with a capacity of less than 10,567 gallons, providing (a) the vapor pressure of the stored liquid is less than 1.5 psia at storage temperature, or (b) vessels greater than 580 gallons with stored liquids having greater than 1.5 psia vapor pressure are equipped with a permanent submerged fill pipe.
2. Storage vessels containing inorganic aqueous liquids, except inorganic acids with boiling points below the maximum storage temperature at atmospheric pressure.
3. Laboratory fume hoods and vents used exclusively for chemical or physical analysis, or for “bench scale production” R&D facilities.
4. Machinery lubricants and waxes, including oils, greases or other lubricants applied as temporary protective coatings.
5. #2 oil-fired space heaters or ovens rated at less than two million BTU per hour actual heat input, provided the maximum sulfur content is less than 0.5% by weight.
6. Machining of metals, providing total solvent usage at the source for this activity does not exceed 60 gallons per month.
7. Internal combustion engines using only gasoline, diesel fuel, natural gas, or LP gas rated at 50 hp or less.
8. Volatile organic compound and hazardous air pollutant storage containers, as follows:
 - (a) Tanks, less than 1,000 gallons, and throughput less than 12,000 gallons per year;
 - (b) Lubricating oils, hydraulic oils, machining oils, and machining fluids.
9. Machining where an aqueous cutting coolant continuously floods machining interface.
10. Degreasing operations, using less than 145 gallons per year.
11. Maintenance equipment, not emitting HAPs: brazing, cutting torches, soldering, welding.
12. Underground conveyors.
13. Coal bunker and coal scale exhausts.
14. Purging of gas lines and vessels related to routine maintenance.
15. Flue gas conditioning systems.

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

16. Equipment used to collect spills.
17. Blowdown (sight glass, boiler, compressor, pump, cooling tower)
18. Emergency generators: gasoline-powered (less than 110 hp), diesel-powered (less than 1600 hp).
19. Stationary fire pumps.
20. Grinding and machining operations vented through fabric filters, scrubbers, mist eliminators, or electrostatic precipitators (e.g., deburring, buffing, polishing, abrasive blasting, pneumatic conveying, woodworking)
21. Vents from ash transport systems not operated at positive pressure.
22. Wastewater treatment (for stream less than 1% oil and grease).
23. Any operation using aqueous solution (less than 1% VOC).
24. Repair and maintenance of ESPs, fabric filters, etc.
25. Heat exchanger cleaning and repair.
26. Ash pond and ash pond maintenance.
27. Lime handling system; including truck unloading (for scrubber lime and stabilization lime), and lime feed systems.
28. Two fly ash silos (pneumatic loading)

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

Particulate, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein. Compliance with the visible emission limitation for emissions Unit 02 shall be determined using continuous opacity monitoring (COM) data when the scrubber is in operation.

SECTION E - CONTROL EQUIPMENT CONDITIONS

1. Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice as well as in accordance with manufacturer's specifications for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a) Date, place as defined in this permit, and time of sampling or measurements.
 - b) Analyses performance dates;
 - c) Company or entity that performed analyses;
 - d) Analytical techniques or methods used;
 - e) Analyses results; and
 - f) Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.
3. The permittee shall allow the Division or authorized representatives to perform the following:
 - a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b) Have access to and copy, at reasonable times, any records required by the permit:
 - i) During normal office hours, and
 - ii) During periods of emergency when prompt access to records is essential to proper assessment by the Division;
 - c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency; and
 - d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency.
4. No person shall obstruct, hamper, or interfere with any Division employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Ashland Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Director in accordance with the requirements of Regulation 401 KAR 61:005 and/or Regulation 401 KAR 59:005, General Provisions, Section 3. All reports shall be certified by a responsible official pursuant to Section 6 (1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
6. In accordance with Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Ashland Regional Office by telephone as promptly as possible of any deviation from permit requirements, including those due to malfunctions, unplanned shutdowns, ensuing startups, or upset conditions, and report excess emissions. For this source, promptly will be defined as three (3) hours from the occurrence of the deviation. Pursuant to Regulation 401 KAR 50:035, Section 7(1)(e), the permittee shall submit a written notice describing the probable cause of the deviations and corrective actions or preventive measures taken within two (2) working days from the occurrence of the deviation when a technology-based emission limitations are exceeded.
7. The permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date to the Division for Air Quality's Ashland Regional Office and the U.S. EPA in accordance with the following requirements:
 - a) Identification of each term or condition of the permit that is the basis of the certification;
 - b) The compliance status regarding each term or condition of the permit;
 - c) Whether compliance was continuous or intermittent;
 - d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7 (1) (c), (d), and (e);
 - e) Other facts the Division may require to determine the compliance status of the source; and
 - f) The certification shall be postmarked by the thirtieth (30th) day following the applicable permit issuance anniversary date.
8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall report all information necessary to determine its subject emissions.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), result of performance test shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and are grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. In accordance with Regulation 401 KAR 50:035, Section 7(3)(f), the filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b) If any additional applicable requirements of the Acid Rain Program become applicable to the source;
 - c) The Division or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d) The Division or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit.
6. Pursuant to Regulation 401 KAR 50:035, Section 7(3)(e), the permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.
7. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
8. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6).
9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance.
10. This permit shall not convey property rights or exclusive privileges.
11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
12. Nothing in this permit shall alter or affect the authority of the U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
13. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.
14. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of the issuance of the permit.
15. The permittee may conduct test burns of materials other than those listed in the permit without a construction permit or a reopening of this permit provided that:
 - a) Notification is provided to the Division at least 30 days prior to initiation of the test burning of the material;
 - b) The source complies with all applicable regulations and emission limitations;
 - c) The permittee agrees to perform such additional testing as may be required by the Division;

SECTION G - GENERAL CONDITIONS (CONTINUED)

16. The permanent burning of any materials (addressed in above condition) shall be allowed upon completion of testing provided that :
 - a) The Division determines that a permit is not required. Such determination shall be made within sixty (60) days of the application receipt along with the test result;
 - b) The permittee keep records of date and time of burn;
 - c) The permittee keeps records of analysis and feed rate of material;
 - b) Burning any of those materials shall not be subject to any applicable regulation and the source shall comply with all applicable regulation and emission limitations.
17. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.
18. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions in accordance with Regulation 401 KAR 50:055, as long as the permittee follows the requirements of Regulation 401 KAR 50:055.
19. Pursuant to Section VII 2.2.(1) of the policy manual of the Division for Air Quality as referenced by regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol(Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, all the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date until the renewal permit is issued or denied by the Division.

SECTION G - GENERAL CONDITIONS (CONTINUED)

c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
2. The source shall comply with all requirements and conditions of the Title IV Acid Rain Permit(s) issued for this source.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(e) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - i) An emergency occurred and the permittee can identify the cause of the emergency;
 - ii) The permitted facility was at the time being properly operated;
 - iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

(f) Risk Management Provisions under the Clean Air Act 112(r)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan to the U.S. EPA, Region IV with a copy to this Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S. EPA.
 - b. Submit additional relevant information if requested by the Division or U.S. EPA.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards of recycling and recovery equipments contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of the refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SECTIONS

None

SECTION I - COMPLIANCE SCHEDULE

None